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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,142	09/29/2000	John A. Higgins	00SC048US7	2762

7590

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EXAMINER

LEE, BENNY T

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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67 6142

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

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	12

DATE MAILED:

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 17 Oct 2002 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), 2 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449                  | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474      | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-31 (renumbered) are pending in the application.  
Of the above, claims 8-30 are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-7, 31 (renumbered) are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☒ Claims 1-31 (renumbered) are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are: ☐ acceptable;  
☒ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☒ The proposed drawing correction, filed 17 Oct 2002, has been ☒ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections **MUST** be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

SN 676142

Art Unit: 2817

Claims 8-30 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8.

The disclosure is objected to because of the following informalities: Page 3, line 32, note that "as" should be rewritten as ~~--a--~~ for clarity of description. Page 9, line 5, note that ~~--Ev--~~ should follow "signals" for clarity of description. Page 10, line 22, note that "patches 18" should properly be ~~--strips 18--~~ for consistency of description. Page 12, line 10, note that ~~--(e.g. insulating Ga As)--~~ should follow "dielectric" for consistency of description; line 16, likewise, ~~--inductance--~~ should precede "vias "; line 22, finally note that ~~--(i.e. variable capacitance)--~~ should follow "varactor". Page 16, line 26: ~~note that "chip(s) 106" should correctly be --chip(s) 108--.~~ Appropriate correction is required.

The drawings are objected to because of the following: In Fig. 5, reference label ~~--48a--~~ needs to be provided. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Art Unit: 2817

Misnumbered claim 8 has been renumbered claim 31.

Claims 1-7, 31 (renumbered) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, note that the positive recitation of "altering" of the "surface impedance" appears to be inconsistent with the earlier non-positive recitation of the "surface impedance" being "alterable". Clarification is needed.

Claim 1 is found objectionable since in line 3, note that "it" should be rephrased to identify the intended feature, and in the third paragraph, third line, "at least on pair" appears that it should correctly be --at least one pair--.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the Kanack.

The Kanack reference in Figs. 25(a) & 25(b), disclose a cross-sectional view of a waveguide having oriented high impedance walls (i.e. on all four walls) which present a high impedance to signals propagating within the waveguide which inherently have an E field oriented perpendicular to the wall structure. Moreover, note that the wall structures predominantly present

Art Unit: 2817

a capacitive impedance to the signals, and the wall structures can be selectively varied or tuned (see col 4, ls 51-59) and thus can inherently effect phase variations within the waveguide.

Applicant's arguments filed 17 October 2002 have been fully considered but they are not persuasive.

Regarding the remaining informalities noted above, applicants' have asserted that making the requested changes would have been duplicative. Contrary to applicants' assertions, the requested insertions merely make the specification description consistent with the labeling in the corresponding drawing figures.

Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Claims 4-7, 31 (renumbered) would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 2817

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Lee whose telephone number is (703) 308 4902.

A handwritten signature in black ink that reads "Benny Lee". The signature is written in a cursive, flowing style.

BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817

B. Lee

January 10, 2003